

Prof. Filippo Berto



Filippo Berto got his degree summa cum laude in 'Industrial Engineering' in 2003 at the University of Padua (Italy). After attending the PhD course in Mechanical Engineering and Materials Science at the University of Florence, he worked as researcher in the same field at the University of Padua. From 2006 to 2013 he was Assistant Professor at the University of Padua, Department of Management and Engineering, Vicenza and from October 2014 to September 2016 he was Associate Professor.

Since 1 January 2016 he has been appointed as International Chair of Fracture Mechanics and Fatigue accordingly to the excellence program developed by NTNU. He is the founder of the new fatigue lab at MTP (the laboratory dealing with multiaxial facilities will be entitled to the memory of Prof. Paolo Lazzarin). He is author of more than 500 technical papers, mainly oriented to materials science engineering, the brittle failure of different materials, notch effect, the application of the finite element method to the structural analysis, the mechanical behavior of metallic materials, the fatigue performance of notched components as well as the reliability of welded, bolted and bonded joints. Since 2003, he has been working on different aspects of the structural integrity discipline, by mainly focusing attention on problems related to the static and fatigue assessment of engineering materials and components.

Prof. Berto gives regular keynote and plenary lectures at major international conferences on engineering materials, fatigue and fracture. He maintains extensive international links, through past and current visiting appointments at prestigious Universities and Research Centers.

Prof. Berto has considerable experience in materials science, fatigue of metals, fracture and mechanical testing related to steels, aluminum alloys, hardmetals, ceramics and polymers, together with a good metallurgical knowledge of their microstructures and properties. He has significant expertise in fatigue design for machine components and welded structures (plus welding processes and metallurgy), fatigue life prediction, engineering defect assessment, failure analysis, stress analysis, fractography, and materials selection. He has been involved in numerous projects funded both by the University of Padova, by the Italian Ministry of University and Research and by private companies. He is participating as main investigator to 2 EU

projects and all together in his career he was able to attract huge funding for research activities. Main ongoing projects are related to industrial collaborations with Cimolai, Zincherie Valbrenta, Omera, Officine Meccaniche Zanetti, Rolls Royce, Sintef, Nexans and many others.